**CLAIMS:**

1. A video camera comprising:

means for generating a digital video signal;

means for generating a modified digital video signal by modifying an amplitude level of said digital video signal according to an approximated curve obtained by dividing a non-linear curve that represents said modified digital video signal as a function of said digital video signal, into a plurality of sections and replacing each of said sections with a respective straight-line segment to form a succession of straight-line segments;

means for generating an image enhancing signal from said digital video signal;

means for generating an inclination coefficient of a respective one of said line segments corresponding to an amplitude level of said digital video signal;

means for generating a modified image enhancing signal whose amplitude level is proportional to said inclination coefficient; and

means for combining said modified image enhancing signal and said modified digital video signal so as to produce an image enhanced modified digital video signal.

2. The video camera of claim 1, wherein said means for generating the inclination coefficient includes:

means for selecting one of said straight-line segments according to an amplitude level of said digital video signal; and

means for outputting said inclination coefficient of the selected one of said straight-line segments to said modified image enhancing signal generating means.

3. The video camera of claim 1, wherein said means for generating the inclination coefficient includes a low pass filter for receiving and attenuating high frequency signals of said digital video signal which cause aliasing.

4. The video camera of claim 1, wherein said means for generating the modified image enhancing signal includes multiplying means for multiplying an amplitude level of said image enhancing signal by said inclination coefficient.

5. The video camera of claim 1, wherein said non-linear curve that represents the modified digital video signal is a gamma correction function.

6. The video camera of claim 1, wherein said means for generating a digital video signal includes analog video signal generating means for generating an analog video signal from an optical image, and analog-to-digital converting means for converting said analog video signal into said digital video signal.

7. The video camera of claim 1, further comprising zero insertion means for up-converting the frequency of said

digital video signal and thereby effectively increasing the sampling rate of said digital video signal.

8. In a video camera having means for generating a digital video signal, a signal modifying circuit for modifying an amplitude level of said digital video signal according to a non-linear curve that represents a desired modified digital video signal as a function of said digital signal, comprising:

means for dividing said non-linear curve into a plurality of sections and replacing each of said sections with a respective straight-line segment which can be expressed as a linear expression to form a succession of straight-line segments;

low pass filter means to which said digital video signal is supplied to produce a filtered digital video signal in which high frequency signals of said digital video signal capable of causing aliasing are attenuated;

means for generating a multiplying coefficient and an adding coefficient of a linear expression of one of said straight-line segments corresponding to an amplitude level of said filtered digital video signal;

means for multiplying an amplitude level of said digital video signal by said multiplying coefficient to produce a multiplied digital video signal; and

means for combining said multiplied digital video signal and said adding coefficient to generate said modified digital video signal.

9. The video camera of claim 8, wherein said means for generating the multiplying and adding coefficients includes:

means for detecting an amplitude level of said filtered digital video signal;

means for selecting said one of the straight-line segments corresponding to the detected amplitude level; and

means for outputting said multiplying coefficient and said adding coefficient of the linear expression of said one of said straight-line segments.

10. The video camera of claim 8, wherein said non-linear curve representing said modified digital video signal is a gamma correction function.

11. The video camera of claim 8, wherein said means for generating a digital video signal includes analog video signal generating means for generating an analog video signal from an optical image, and analog-to-digital converting means for converting said analog video signal into said digital video signal.

12. The video camera of claim 8, further comprising zero insertion means for up-converting the frequency of said digital video signal and thereby effectively increasing the sampling rate of said digital video signal.

13. A video signal processor comprising:

non-linear correction means for applying a non-linear video correction function to low frequencies of a digital video

signal outside a frequency range affected by aliasing in said non-linear correction means; and

linear correction means for applying a linear video correction function to high frequencies of said digital video signal within said frequency range effected by aliasing in said non-linear correction means.

14. The video signal processor of claim 13, further comprising:

image enhancing means for generating an image enhancing signal from said digital video signal which highlights contours of images represented by said digital video signal.

15. The video signal processor of claim 14, wherein said non-linear correction means further applies a non-linear video correction function to low frequencies of said image enhancing signal outside a frequency range affected by aliasing in said non-linear correction means; and

wherein said linear correction means further applies a linear video correction function to high frequencies of said image enhancing signal within said frequency range affected by aliasing in said non-linear correction means.

16. The video signal processor of claim 13, wherein said linear video correction function is a straight-line segment selected from a plurality of successive straight-line segments approximating a gamma correction function.

17. The video signal processor of claim 13, further comprising an analog video signal generating means for generating an analog video signal from an optical image, and analog-to-digital converting means for converting said analog video into said digital video signal.

18. The video camera of claim 13, further comprising zero insertion means for up-converting the frequency of said digital video signal and effectively increasing the sampling rate of said digital video signal.

19. A method of processing a digital video signal in a video camera comprising the stage of:

correcting high frequency components of said digital video signal by applying a linear correction function to said high frequency components within a frequency range affected by aliasing: and

correcting low frequency components of said digital video signal by applying a non-linear correction function to said low frequency components of said digital video signal outside said frequency range affected by aliasing.

20. The method of claim 19, further comprising dividing a gamma correction function into a plurality of successive sections;

replacing each of said sections with a respective straight-line segment to form a plurality of straight-line segments which approximate said gamma correction function; and

selecting one of said straight-line segments as said linear correction function applied to said high frequency components of the digital video signal.

21. The method of claim 20, further comprising attenuating said high frequency components of said digital video signal within said frequency range affected by aliasing prior to applying said linear correction function to said high frequency components.

22. The method of claim 21, further comprising generating an image contour signal which emphasizes an image contour of a video image represented by said digital video signal, and combining said image contour signal with said digital video signal after said correcting of the high and low frequency components of the digital video signal.

23. The method of claim 22, further comprising, prior to said combining of said image contour signal with said digital video signal, correcting said image contour signal by applying a linear correction function to high frequencies of said image contour signal within said frequency range affected by aliasing, and by applying a non-linear correction function to low frequencies of said image contour signal outside said frequency range affected by aliasing.

24. The method of claim 23, wherein, in said correcting of the image contour signal, said linear correction function applied to said high frequencies of the image contour

signal is selected from among said straight-line segments which approximate said gamma correction function so that the straight-line segment selected for correcting said image contour signal corresponds to colors of the respective image contour and is represented by an inclination coefficient.